SPRINKLER IRRIGATION DATA SHEET

SWCD_____FIELD OFFICE_____

COOPERATOR_____ENG.JOB CLASS_____LOCATION_____

PROGRAM_____CONTRACT NO._____CIN_____FIELD NO._____

1. **RESOURCE AREA**_____DESIGN SOIL NAME_____

   DESCRIPTION OF SOIL_____
   _____

   RESOURCE AREA_____, DESIGN AREA_____acres

2. **CROPS:**
   a. _____ _____acres
   b. _____ _____acres
   c. _____ _____acres
   d. _____ _____acres

   TOTAL acres

3. **WATER SUPPLY:**

   SOURCE OF SUPPLY: (Reservoir, Well, Stream, etc.)

   a. RESERVOIR:
      STORAGE_____ac-ft

      AVAILABLE FOR IRRIGATION_____ac-ft

   b. WELL:
      MEASURED CAPACITY_____gpm

      STATIC LEVEL_____ft

      MAXIMUM PUMPING LIFT_____ft

   c. STREAM:
      MEASURED FLOW (Season of Peak Use)_____gpm

      QUALITY OF WATER (Evidence of suitability_____

      DISTANCE OF SUPPLY SOURCE TO FIELD_____ft

      ELEVATION DIFFERENCE SOURCE TO FIELD_____ft

4. **OTHER DATA:**
   Type of Sprinkler System_____

   Number of moves desired per day_____(for sideroll, handmove)

   Type of power to be used_____

5. **LAYOUT SKETCH** Scale 1" =_____ft

SHOW: a. Source of Water
b. Major Elevation Differences
c. Row Direction
d. Sprinkler System Layout
e. Plan of Operation
f. Field Obstructions (Gullies, Trees, Buildings, etc.)
g. North Arrow

FIELD NUMBER:				SYSTEM DESIGN

6. **SOIL INFORMATION:**					
a. SOIL (unit, name, or group).....					
b. MOISTURE HOLDING CAPACITY (in/ft)					
c. BASIC INTAKE RATE (in/hr).....					
7. **CROP INFORMATION:**					
a. KIND OF CROP.....					
b. ACREAGE TO BE GROWN.....					
c. MOIST. EXTRACTION ROOT DEPTH (ft)					
d. IRRIGATION INTERVAL (days)					
e. USE RATE (in/day).....					
8. **DESIGN PROCEDURE:**					
a. AVAILABLE WATER SUPPLY (GPM).....					
b. APPLICATION RATE (in/day).					
c. TIME PER LATERAL SET (hrs)					
d. GROSS WATER APPL./IRRIGATION.(in)					
e. WATER APPLICATION EFFICIENCY (%).					
f. NET WATER APPL./IRRIGATION. (in).					
g. LATERAL SETTINGS PER DAY					
h. DAYS OF OPERATION PER INTERVAL					
i. *QUANTITY OF WATER REQUIRED (gpm)					

(8d) GROSS WATER APPLIED PER IRRIGATION =

$$\frac{\text{gpm (8a)} \times \text{days (7d)} \times \text{hrs (8c)}}{453 \times \text{acreage grown (7b)}} = \text{In.}$$

(8i) QUANITY OF WATER REQUIRED TO MEET PEAK USE =

$$\frac{453 \times \text{acres} \times \text{inches gross application}}{\text{\_\_\_\_\_ hours opr. per day} \times \text{\_\_\_\_\_ days per irrigation}} = \text{GPM}$$

9. **SYSTEM SPECIFICATIONS:** (sideroll, handmove):_____
    a. Sprinkler spacing _____ft, Lateral spacing _____ft
    b. Nozzle size _____ x _____
       Capacity_____ GPM @ _____ PSI or _____ ft
    c. Max. length lateral (1) _____ft, Size _____ins. ,No. of Sprinklers _____
                           (2) _____ft, Size _____ins. ,No. of Sprinklers _____
    d Pressure loss in lateral line_____ PSI or _____ ft.
    e. Total no. of laterals _____; No operating simultaneously _____
       Total no. of sprinklers_____
    f. Design capacity _____
    g. No. of valves _____; size _____ and spacing _____ on main line

10. **SYSTEM SPECIFICATIONS:** (center-pivot, linear move)
    a. Pressure loss in lateral line _____ PSI or _____ ft.
    b. Length of lateral _____ ft._____ ft._____ ft._____ ft.
    c. Lateral Pipe Size _____ in._____ in._____ in._____ in.
    d. Sprinkler spacing _____ ft.
    e. Height of nozzle above ground _____ ft.
    f. Height of lateral pipe above ground _____ ft.
    f. Type of sprinkler_____.
    g. Operating Pressure at last nozzle _____ PSI
    h. Maximum downhill elevation difference in lateral _____ ft.
       (From pivot pad to ground under last nozzle.)
    i. Maximum uphill elevation difference in lateral _____ ft.
       (From pivot pad to ground under last nozzle.)
    j. Design Capacity _____ GPM.
    k. Operating pressure at pivot point _____ PSI.

Attach pipeline design information (if applicable).

DESIGNED BY_____DATE_____

CHECKED BY_____DATE_____

APPROVED BY_____DATE_____

THIS PRACTICE MEETS SPECIFICATIONS

REMARKS/EXCEPTIONS_____

_____

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SIGNED_____DATE_____